

ProfsApp: Android App for Professional Networking and Resume Sharing

Lata Sankpal^{#1}, Neha Tawar^{#2}, Saurabh Rai^{#3}, Surabh shah^{#4}

[#]Department of Computer Engineering, Sinhgad Academy Of Engineering, Savitribai Phule Pune University, Pune, Maharashtra, India

1ljsankpal.sae@sinhgad.edu

2neha.tawarsss13@gmail.com

3raisaurabh777@gmail.com

4surabhshah@gmail.com

Abstract—The future demands the solutions to be mobile and portable for their widespread use and effectiveness. Ubiquitously the Internet gets most of the traffic from portable devices. Hence there is a need for Professional Communication and recruitment to go mobile. This paper intends to throw light on ProfsApp which is a light weight Professional Networking App that simplifies employee referral, standardizes and enhances professional communication.

Keywords: Android, Google Cloud Messaging, Push Notification, Resume Sharing, Slang Processing, Text Compression, Chat Interface, Bluetooth.

I. INTRODUCTION

Social networking field has become pretty mature because of new apps in the market everyday but professional networking is still lagging behind and is still in its Infancy. There are many aspects in which professional networking can be improved. This paper focuses on some of those improvements.

Recruitment process is an important exercise carried out in all the companies on all the levels. To make recruitment process fruitful, an efficient Human Resource Management (HRM) is required. This paper explains about ProfsApp which helps to simplify Recruitment by providing an efficient chat interface and fast yet reliable resume creation and sharing using various methods.

II. DESIGN

A. Chat

Push messaging provides an important aspect of server to device communication, and we specifically focus on the integration of cloud computing with mobile devices through the use of push-based technologies [2]. We have used Google Cloud Messaging Service for this purpose.

The main purpose of chat is nothing but communication between the users. Some of the basic features are:

- Instant Messaging(Present in Initial Release)
- Send Files (In Future Release)
- Send Contacts (In Future Release)
- Send Images (In Future Release)

The basic idea behind how chat works using GCM can be understood from the following diagram:

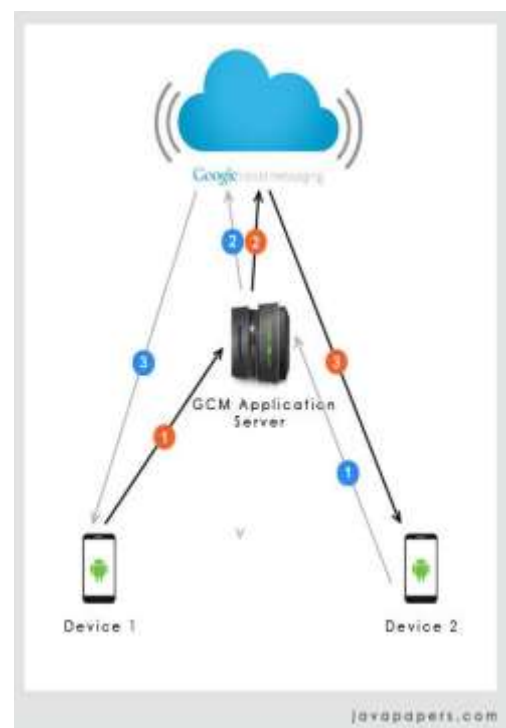


Fig. 1 Simple Chat Structure [8]

A Chat Server is required to coordinate stuff between different devices [6]. Fig. 1 shows different components used in chat application.

Working

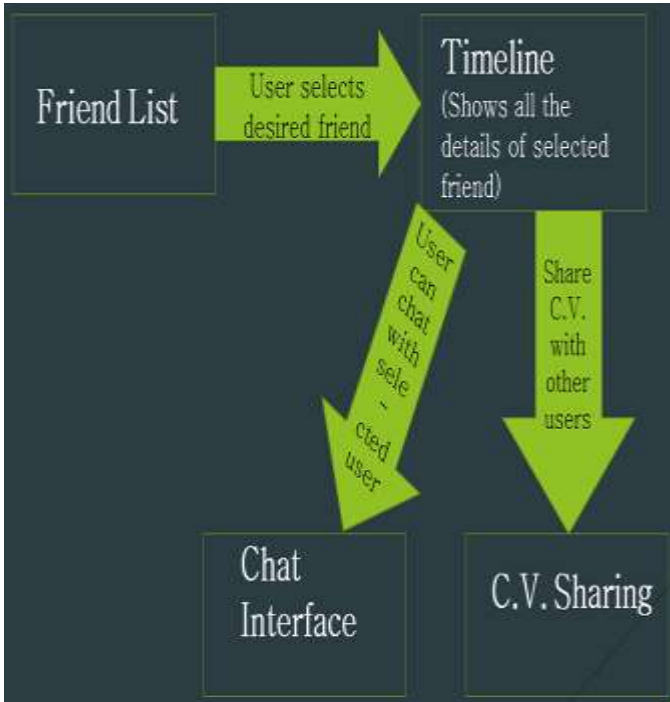


Fig. 2 Block diagram of ProfsApp

Fig. 2 shows the working block diagram of Profsapp.

REGISTRATION. Firstly a user has to register after installing ProfsApp. The server adds a record for this user to the list of active users in the database with a system generated unique ID. From then on, user can use Chat and other features [6].

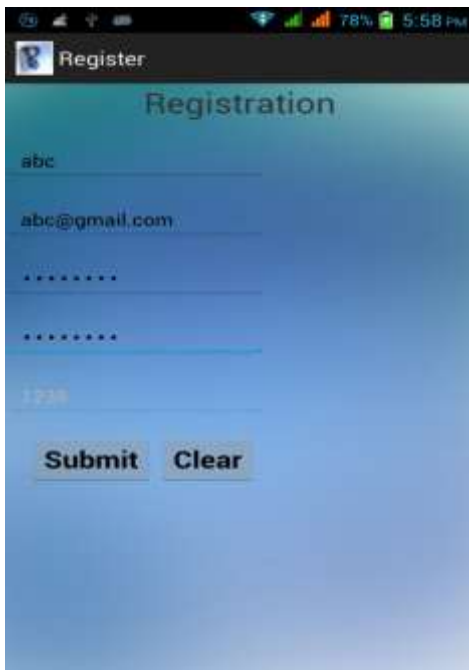


Fig. 3 Registration form in ProfsApp

FRIEND LIST. This list shows the Friends or Contacts from the user's device which are also registered to the ProfsApp server[6].The user can tap on any contact to go to the next activity to use the desired features explained below.

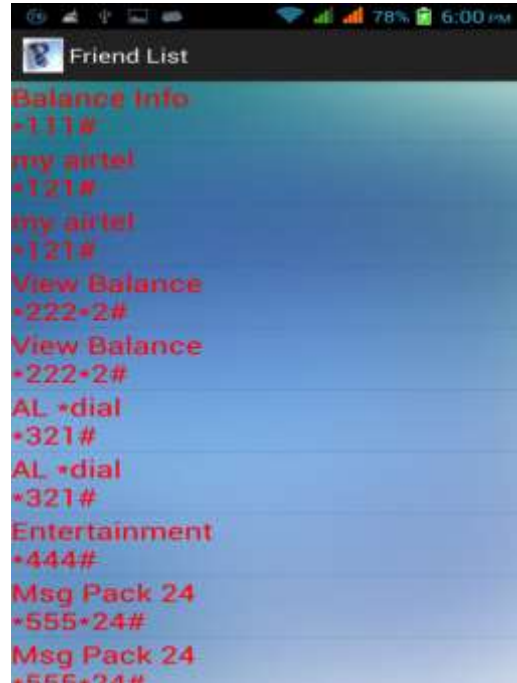


Fig. 4 Friend List in ProfsApp

PROFESSIONAL STATUS. It shows the professional portfolio of the tapped user who is a contact on the user's device and also uses ProfsApp [6].



Fig 5. Timeline in ProfsApp

SHARING. This lets the user to share the latest resume of any of his contacts(with contact's permission) as and when needed on the go. This is possible because the resume is created by using the information from the Professional Status which is always updated and up-to-date [6].The sharing can be done in many ways e.g. sharing via Bluetooth, sharing via e-mail, etc.



Fig 6. Resume sharing in ProfsApp

A. E-mail Sharing

E-mail is a fast and trusted source of resume sharing. Also majority of companies or firms rely on e-mail for resume sharing as it gives a feel of professional letter head. Also it is a free source of file sending to any one on the globe.

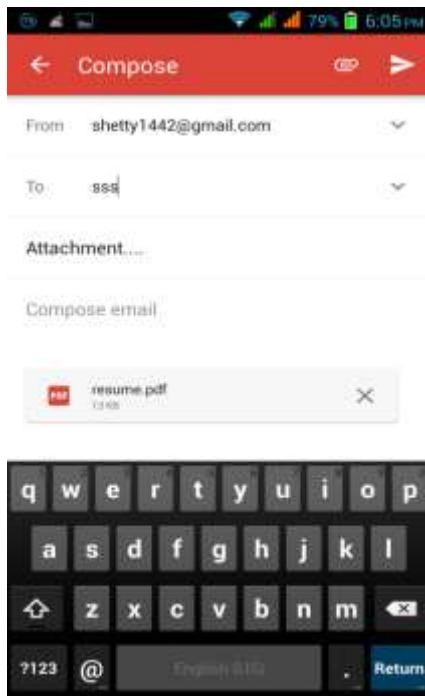


Fig 7. Email Sharing in ProfsApp

B. Bluetooth Sharing

Working:

The popularity of wireless communication application is increased specially in the ISM band which provides services for free. Bluetooth is one of the technology in unlicensed band which becomes very useful now a days in many short range application because of its advantages like low power consumption, low cost, low

size, universal applicability, multiple simultaneous link [1].

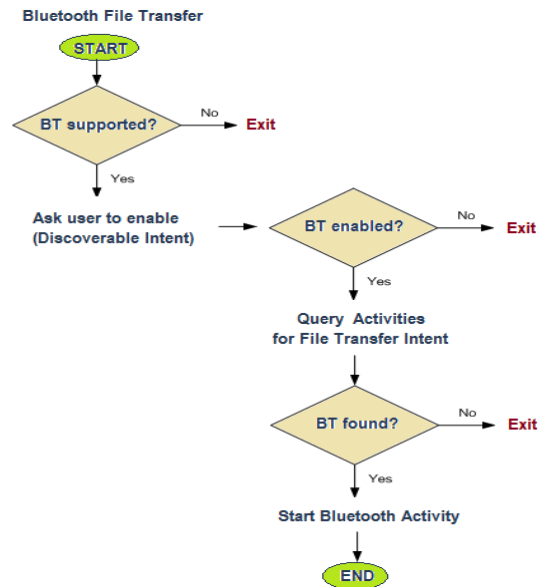


Fig. 8 Flowchart of File Transfer Using Bluetooth[9]

The Android platform includes support for the Bluetooth network stack, which allows a device to wirelessly exchange data with other Bluetooth devices. Fig. 3 shows step-by-step process for Bluetooth file transfer. The application framework provides access to the Bluetooth functionality through the Android Bluetooth APIs. These APIs let applications wirelessly connect to other Bluetooth devices, enabling point-to-point and multipoint wireless features [7].

Using the Bluetooth APIs, an Android application can perform the following [7]:

- Scan for other Bluetooth devices
- Query the local Bluetooth adapter for paired Bluetooth devices
- Fig. 3 shows list of paired devices
- Establish RFCOMM channels
- Connect to other devices through service discovery
- Transfer data to and from other devices
- Manage multiple connections
- Fig. 4 shows a complete Bluetooth transfer.

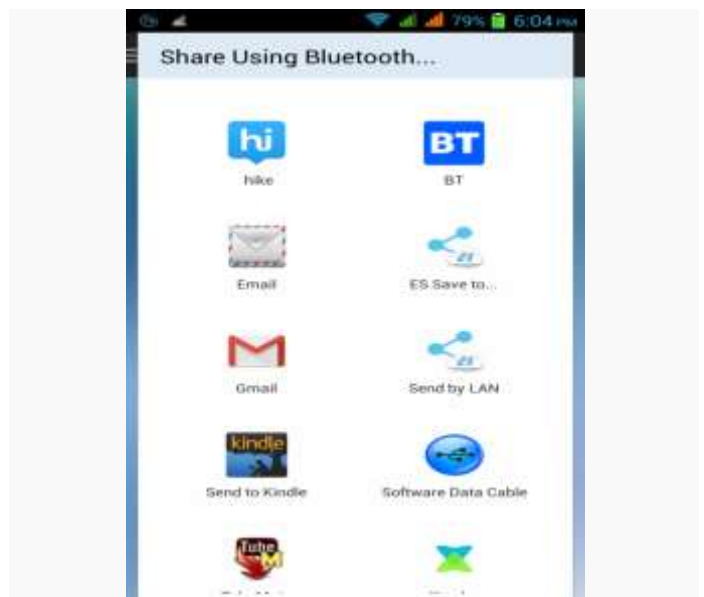


Fig. 9 App list on Phone



Fig. 10 Bluetooth Paired Devices List[9]



Fig. 11 Details of File Sent

III. CHRONOLGY

This section of the paper deals with the chronological development of the recruitment process.

Wikipedia defines recruitment as “**Recruitment** refers to the overall process of attracting, selecting and appointing suitable candidates for jobs within an organization, either permanent or temporary. Recruitment can also refer to processes involved in choosing individuals for unpaid positions, such as voluntary roles or training programs” [3].

Social recruiting has a major advantage over traditional recruiting: it’s more human. Compared to the “post a job; wait for hundreds of resumes; let ATS filter through keywords; never get back to anyone” process many use today, social recruiting is a transparent, active approach

where only the best candidates are sourced. In addition, recruiters can determine first impressions and cultural fit — even perform a bit of a background check — before approaching the candidate [4].

Hence, this paper explains the recruitment process as-

A. Traditional Approach

According to traditional approach, in correspondence to an advertisement, many people visit the recruitment area, submit hard-copies of resumes and wait hours long for interview and final selection list. This is a very time consuming task, thus the efficiency is low.

B. Modern Approach

“Smart phones access to countless applications and virtually any web page. Job candidates the world over are glued to their phones. Interact in their space by optimizing your careers portal, providing ample information about your company online, and even leveraging older phone features like SMS for recruiting”[5].

In modern recruitment process, resumes are sent to the company, and only a specific amount of people are selected which are then eligible for further rounds of process.

Thus a wastage of time and effort is avoided using modern approach of recruitment process.

IV. EXTRA FEATURES

ProfsApp offers certain interesting and out of the box features that can enhance the professional communication to a great extent and at the same time can save user’s data. The two important features are:

A. STS(Slang to Standard)

This feature uses machine learning to learn how the user communicates and his/her slang usage. After the learning phase the user can still continue his slang usage but the slang words will be replaced by Standard English words before sending the message to the receiver. The algorithm used to predict standard words for slangs is based on the pronunciation as slang words mostly resemble with their actual Standard English words in pronunciation.

B. Text Compression

The app uses special Bit compression algorithm to compress the text while chatting. The algorithm is independent of whether the text has more repetition or not. It produces decent results even when there is no repetition. Hence this algorithm is suited for chat compression. The experimental results show that bigger messages more is the compression.

V. PROBLEMS IN AVAILABLE APPS AND FEATURES OF PROFSAPP TO CATER THEM

- The majority of apps in regards to recruitment and/or HRM on various app stores of Android basically focus on resume building and sharing via e-mail.
- The app stores lack an app that gives an efficient chat interface along with powerful resume generator and sharer with variety of sharing choices.
- The paper defines a detailed report of ProfsApp that can provide user with a user-friendly chat interface.
- It can also provide a large amount of templates along with a custom template for resume building.
- And nevertheless many sharing options like e-mail, Bluetooth and in-app sharing.

VI. CONCLUSIONS

The paper in brief gives an explanation of ProfsApp as there is a need of an application for professional networking with resume building and sharing which is easy to use, robust. The paper also explains the whereabouts of the profsApp, thus chronologically explaining the development of the app and its future scope.

ACKNOWLEDGEMENTS

The authors would like to express special thanks and heartily gratitude to the Head of Department, **Prof. B. B. Gite** for inspiring them throughout the completion of their research. The acknowledgement would be incomplete if the authors don't record their sense of gratitude to the principal, **Dr. V. M. Wadhai** who gave them the necessary guidance, encouragement, by providing them with all the facilities available to work on this research paper.

REFERENECES

- [1] Parmar, C.D.; Dwivedi, V.V.; Wandra, H.H., "Firmware for file transfer between Bluetooth module and flash memory through microcontroller in an emerging concept of wireless portable memory access," *Communication Control and Computing Technologies (ICCCCT), 2010 IEEE International Conference on*, vol., no., pp.42,46, 7-9 Oct. 2010
- [2] Jarle Hansen¹, Tor-Morten Grønli^{1,2}, Gheorghita Ghinea^{1,2}; "Towards Cloud to Device Push Messaging on Android: Technologies, Possibilities and Challenges" *Int. J. Communications, Network and System Sciences*, 2012, 5, 839-849, <http://dx.doi.org/10.4236/ijcns.2012.512089> Published Online December 2012 (<http://www.SciRP.org/journal/ijcns>)
- [3] www.wikipedia.org
- [4] Mark Babbitt, YouTern
- [5] <http://tribehr.com/blog/traditional-recruiting-methods-vs-modern-recruiting-methods>
- [6] <http://www.raywenderlich.com/32960/apple-push-notification-services-in-ios-6-tutorial-part-1>
- [7] <http://developer.android.com/guide/topics/connectivity/bluetooth.html>
- [8] <http://www.javapapers.com>
- [9] <http://www.javacodegeeks.com>
- [10] www.smartrecruituk.com/about_us
- [11] www.superresumebuilder.com